

WHAT IS CLAIMED IS:

1 1. In a radio communication system having a network
2 part that is capable of communicating data messages that
3 are generated at a data message service center to a mobile
4 station operable in a radio communication system, said
5 mobile station operable pursuant to at least one
6 operational parameter, an improvement of said network part
7 capable of downloading initial operating parameters to said
8 mobile station to initially configure said mobile station,
9 said improvement comprising:

10 an initial operational parameters initiation signal
11 generator coupled to receive an indication of a request to
12 download values of said initial operational parameters to
13 the mobile station, said initial operational parameters
14 initiation signal generator for generating an initiation
15 signal directed to the data message service center to
16 initiate downloading of said values of said initial
17 operational parameters to said mobile station; and

18 an initial operational parameters request signal
19 generator positioned at said data message service center,
20 said initial operational parameters request signal
21 generator for generating a data message request for

22 communication to said mobile station, said data message
23 request requesting initiation of the downloading of said
24 initial operational parameters of said mobile station.

1 2. An apparatus as claimed in Claim 1 wherein said
2 radio communication system provides for Short Message
3 Service (SMS) message communication, wherein said data
4 message service center comprises an SMS service center, and
5 wherein said initial operational parameters request signal
6 generator is positioned at the SMS service center.

1 3. An apparatus as claimed in Claim 2 wherein said
2 data message request generated by said initial operational
3 parameters request signal generator comprises an SMS
4 message for communication to said mobile station.

1 4. An apparatus as claimed in Claim 1 further
2 comprising a mobile station apparatus for downloading
3 values of said initial operational parameters pursuant to
4 which said mobile station is operable, said mobile station
5 apparatus comprising:

6 a data message request detector coupled to receive
7 indications of a data message request generated by said
8 initial operational parameters request signal generator,
9 said data message request detector for detecting a data
10 message request requesting the initiating of the downloading
11 of said initial operational parameters to said mobile
12 station.

1 5. An apparatus as claimed in Claim 4 wherein said
2 radio communication system is operated by a system operator
3 having a node-device coupled to said network part, wherein
4 said data message request is of values identifying the
5 node-device and wherein said mobile station further
6 comprises:

7 a data call initiator coupled to said data message
8 request detector, said data call initiator operable
9 responsive to detection by said data message request
10 detector of the data message request to initiate a data

11 connection between said mobile station and said node-device
12 coupled to said network part and identified in said data
13 message request.

1 6. An apparatus as claimed in Claim 5 wherein said
2 apparatus further comprises a node-device apparatus for
3 downloading values of said initial operational parameters
4 pursuant to which said mobile station is operable, said
5 node-device apparatus comprising:

6 a data call connector operable responsive to
7 initiation by said data call connection initiator of the
8 data call connection, said data call connector for
9 completing said data call connection between said node-
10 device and said mobile station.

1 7. A node-device apparatus as claimed in Claim 6
2 further comprising an initial operational parameters value
3 provider coupled to said data call connector, said initial
4 operational parameters value provider for providing values
5 of said initial operational parameters to said mobile
6 station subsequent to completion of a data call between
7 said node-device and said mobile station.

1 8. An apparatus as claimed in Claim 7 wherein said
2 data call initiator further comprises a data call status
3 reporter operable at least responsive to successful
4 downloading of values of initial operational parameters
5 provided to said mobile station by said initial operational
6 parameters value provider to report a successful downloading
7 of the values of said initial operational parameters to said
8 mobile station.

1 9. An apparatus as claimed in Claim 8 wherein said
2 data call status reporter further determines whether the
3 downloading of the values of said initial operational
4 parameters to said mobile station is successful.

1 10. An apparatus as claimed in Claim 9 wherein said
2 data call connector further terminates the data call
3 connection subsequent to a report made by said data call
4 status reporter.

1 11. An apparatus as claimed in Claim 6 wherein said
2 data call connector further authenticates said mobile
3 station prior to completion of said data call between said
4 node-device and said mobile station.

1 12. An apparatus as claimed in Claim 6 wherein said
2 network part of said radio communication system comprises a
3 radio access network and a packet data network coupled
4 thereto, wherein said node-device comprises a server
5 coupled to said packet data network and wherein said data
6 call connector comprises a functional entity at said
7 server.

1 13. An apparatus as claimed in Claim 1 wherein said
2 mobile station comprises one of: a cellular telephone,
3 a vending machine, radio communication equipment that
4 utilizes a Global System for Mobile Communications
5 (GSM) module, and radio communication equipment that
6 utilizes a Code Division Multiple Access (CDMA) chipset.

1 14. In a radio communication system having a network
2 part that is capable of communicating data messages that
3 are generated at a data message service center to a mobile
4 station operable in a radio communication system, the
5 mobile station operable pursuant to at least one
6 operational parameter, a method for downloading initial
7 operational parameters to said mobile station to initially
8 configure said mobile station, said method comprising the
9 steps of:

10 powering up said mobile station system;

11 detecting said powering up of said mobile station
12 within a server coupled to said radio communication system;

13 sending a data message to said mobile station to
14 enable said mobile station to make a data connection with
15 said server;

16 establishing a data connection between said server and
17 said mobile station;

18 sending provisioning data containing initial
19 operational parameters from said server to said mobile
20 station;

21 interpreting said provisioning data within said mobile
22 station to determine whether said provisioning data is
23 relevant; and

24 loading said initial operational parameters from said
25 provisioning data into said mobile station when said mobile
26 station determines that said provisioning data is relevant.

1 15. The method as claimed in Claim 14 further
2 comprising the steps of:

3 sending authentication information from said mobile
4 station to said server after a data connection is
5 established between said server and said mobile station;
6 and

7 authenticating said mobile station in said server
8 before said server sends said provisioning data to said
9 mobile station.

1 16. The method as claimed in Claim 15 further
2 comprising the steps of:

3 sending authentication information from said server to
4 said mobile station when said server sends said
5 provisioning data to said mobile station; and

6 authenticating said server in said mobile station
7 before said mobile stations sends interprets said
8 provisioning data.

1 17. The method as claimed in Claim 15 further
2 comprising the step of:

3 sending a failure message from said mobile station to
4 said server when said mobile station fails to authenticate
5 said server.

1 18. The method as claimed in Claim 14 further
2 comprising the step of:

3 sending a commit message to said server when said
4 mobile station determines that said provisioning data is
5 relevant.

1 19. The method as claimed in Claim 14 further
2 comprising the step of:

3 sending a failure message to said server when said
4 mobile station determines that said provisioning data is
5 not relevant.

1 20. The method as claimed in Claim 14 further
2 comprising the steps of:

3 sending to said server a message from said mobile
4 station indicative of a successful loading of said initial
5 operational parameters from said provisioning data into
6 said mobile station; and

7 sending a message from said server to said mobile
8 station acknowledging receipt of said message from said
9 mobile station indicative of a successful loading of said
10 initial operational parameters from said provisioning data
11 into said mobile station.

1 21. The method as claimed in Claim 14 further
2 comprising the steps of:

3 sending to said server a message from said mobile
4 station indicative of a failure to load said initial
5 operational parameters from said provisioning data into
6 said mobile station; and

7 sending a message from said server to said mobile
8 station acknowledging receipt of said message from said
9 mobile station indicative of a failure to load said initial
10 operational parameters from said provisioning data into
11 said mobile station.

1 22. The method as claimed in Claim 16 further
2 comprising the steps of:

3 sending a display message from said mobile station to
4 a user interface of said mobile station to request a user
5 of said mobile station to authorize loading said initial
6 operational parameters into said mobile station; and

7 waiting for said user to enter a user response; and

8 interpreting said provisioning data within said mobile
9 station to determine whether said provisioning data is
10 relevant when said user response is positive.

1 23. The method as claimed in Claim 22 further
2 comprising the step of:

3 sending a failure message to said server when said
4 mobile station determines that said user response is
5 negative.

1 24. The method as claimed in Claim 14 wherein said
2 mobile station comprises one of: a cellular telephone,
3 a vending machine, radio communication equipment that
4 utilizes a Global System for Mobile Communications
5 (GSM) module, and radio communication equipment that
6 utilizes a Code Division Multiple Access (CDMA) chipset.